CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/W.No.14/GMMD/CSR-03/1105b/CUBE/2015-16 29.04.2016

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

*** Customer** : **Asst. Executive Engineer,** Dasarahalli Sub Division, BBMP, Bangalore.

*** Agency** : **Mr. Gnanendra Murthy. M.D,**
#410, Balaji Nilaya, 5th Main Road, 4th Cross, Kengeri Satellite Town, Bangalore – 60.

*** Name of the work** : Improvements to 13th B and C cross roads in Vishveshwaraiah Layout in Bagalagunte Ward No.14, BBMP, Bangalore.

*** Reference** : EE/DD/WO/60/2015-16 Dated: 24.03.2016

*** Sample ID** : Road Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

*** Grade of Concrete** : M_{15}

Compressive Strength as on : 28th day

Sample Received on : 29.04.2016

Sl.No.	*.Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	01.04.2016	29.04.2016	8.198	355.9	15.82
2	01.04.2016	29.04.2016	8.299	363.5	16.16
3	01.04.2016	29.04.2016	8.311	370.2	16.45

* Information is furnished by the Customer/Representative

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Note:

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3. Any Query regarding the report must be reported within 30 days from the date of testing.

****

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Quality Manager

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Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

*** Grade of Concrete** : M_{15}

Compressive Strength as on : 28th day

Sample Received on : 30.04.2016

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	02.04.2016	30.04.2016	8.110	350.6	15.58
2	02.04.2016	30.04.2016	8.250	365.4	16.24
3	02.04.2016	30.04.2016	8.312	372.1	16.54

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Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

* **Grade of Concrete** : M_{15}

Compressive Strength as on : 28th day

Sample Received on : 30.04.2016

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	02.04.2016	30.04.2016	8.285	356.3	15.84
2	02.04.2016	30.04.2016	8.390	368.6	16.38
3	02.04.2016	30.04.2016	8.475	379.3	16.86

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Job No.: CTCE/BBMP/W.No.14/GMMD/WMM/Gradation/2015-16

26.03.2016

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Dasarahalli Sub Division, BBMP, Bangalore.

Agency : **Mr. Gnanendra Murthy. M.D,**
#410, Balaji Nilaya, 5th Main Road, 4th Cross, Kengeri Satellite Town, Bangalore – 60.

Name of Work : Improvements to 13th B and C cross roads in Vishveshwaraiah Layout in Bagalagunte Ward No.14, BBMP, Bangalore.

Reference : EE/DD/WO/60/2015-16 Dated: 24.03.2016

Date of Testing : 26.03.2016

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8470**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	165	165	1.9	98.1	95-100
22.4	2685	2850	33.6	66.4	60-80
11.2	1425	4275	50.5	49.5	40-60
4.75	1305	5580	65.9	34.1	25-40
2.36	1050	6630	78.3	21.7	15-30
0.600	790	7420	87.6	12.4	8-22
0.075	700	8120	95.9	4.1	0-8

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JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.14/GMMD/WMM/AIV/2015-16

26.03.2016

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Dasarahalli Sub Division, BBMP, Bangalore.
Agency	**Mr. Gnanendra Murthy. M.D,** #410, Balaji Nilaya, 5th Main Road, 4th Cross, Kengeri Satellite Town, Bangalore
Name of the Work	Improvements to 13th B and C cross roads in Vishveshwaraiah Layout in Bagalagunte Ward No.14, BBMP, Bangalore.
Reference	EE/DD/WO/60/2015-16 Dated: 24.03.2016
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	26.03.2016

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	389	390	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	88	89	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	301	301	
4	Aggregate Impact value = percent fines	22.62	22.82	
	100* (W_2/W_1)%			22.72

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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Job No.: CTCE/BBMP/W.No.14/GMMD/WMM/S-T/2014-15 26.03.2016

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Dasarahalli Sub Division, BBMP, Bangalore.
Agency	**Mr. Gnanendra Murthy. M.D,** #410, Balaji Nilaya, 5th Main Road, 4th Cross, Kengeri Satellite Town, Bangalore – 60.
Name of Work	Improvements to 13th B and C cross roads in Vishveshwaraiah Layout in Bagalagunte Ward No.14, BBMP, Bangalore.
Reference	EE/DD/WO/60/2015-16 Dated: 24.03.2016
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	26.03.2016

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Result : Flakiness Index = **11.29%**

Elongation Index = **13.69%**

Result : Combined Flakiness & Elongation index **24.98%**

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

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